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Sequence Listing

<100> Kurume University

<120> Gene mina53 involved in cancer, Protein Mina53 and
 Monoclonal Antibody Thereof

<130> JFH15228-PCT

<160> 3

<210> 1

<211> 464

<212> DNA

<213> Homo sapiens

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tgt aag cag atg aag tta gaa gca gct ggg ggg cct tca gct tta aac ttt gac
 Cys Lys Gln Met Lys leu Glu Ala Ala Gly Gly Pro Ser Ala Leu Asn Phe Asp
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agt ccc agt agt ctc ttt gaa agt tta atc tcg ccc atc aag aca gag act ttt
 Ser Pro Ser Ser Leu Phe Glu Ser Leu Ile Ser Pro Ile Lys Thr Glu Thr Phe
 40 45 50

ttc aag gaa ttc tgg gag cag aag ccc ctt ctc att cag aga gat gac cct gca
 Phe Lys Glu Phe Trp Glu Gln Lys Pro Leu Leu Ile Gln Arg Asp Asp Pro Ala
 55 60 65 70

ctg gcc aca tac tat ggg tcc ctg ttc aag cta aca gat ctg aag agt ctg tgc
 Leu Ala Thr Tyr Tyr Gly Ser Leu Phe Lys Leu Thr Asp Leu Lys Ser Leu Cys
 75 80 85 90

agc cgg ggg atg tac tat gga aga gat gtg aat gtc tgc cgg tgt gtc aat ggg
 Ser Arg Gly Met Tyr Tyr Gly Arg Asp Val Asn Val Cys Arg Cys Val Asn Gly
 95 100 105

aag aag aag gtt tta aat aaa gat ggc aaa gca cac ttt ctt cag ctg aga aaa
 Lys Lys Lys Val Leu Asn Lys Asp Gly Lys Ala His Phe Leu Gln Leu Arg Lys
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gat ttt gat cag aaa agg gca acg att cag ttt cac caa cct cag aga ttt aag																			
Asp Phe Asp Gln Lys Arg Ala Thr Ile Gln Phe His Gln Pro Gln Arg Phe Lys																			
	130						135						140						
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Asp Glu Leu Trp Arg Ile Gln Glu Lys Leu Glu Cys Tyr Phe Gly Ser Leu Val																			
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ggc tcg aat gtg tac ata act ccc gca gga tct cag ggc ctg ccg ccc cat tat																			
Gly Ser Asn Val Tyr Ile Thr Pro Ala Gly Ser Gln Gly Leu Pro Pro His Tyr																			
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Thr Ile Ser Gly Leu Val Phe Asp Thr Ala Lys Glu Asp Val Glu Leu Arg Thr																			
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Gly Ile Pro Arg Gln Leu Leu Leu Val Glu Ser Thr Thr Val Ala Thr Arg Arg																			
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Leu Ser Gly Phe Leu Arg Thr Leu Ala Asp Arg Leu Glu Gly Thr Lys Glu Leu																			
	310						315						320						
ctt tcc tca gac atg aag aag gat ttt att atg cac aga ctc ccc cct tac tct																			
Leu Ser Ser Asp Met Lys Lys Asp Phe Ile Met His Arg Leu Pro Pro Tyr Ser																			
325					330				335				340						
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Ala Gly Asp Gly Ala Glu Leu Ser Thr Pro Gly Gly Lys Leu Pro Arg Leu Asp																			
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 Ser Val Val Arg Leu Gln Phe Lys Asp His Ile Val Leu Thr Val Leu Pro Asp
 365 370 375

caa gat caa tct gat gaa gct caa gaa aag atg gtg tac atc tat cat tcc tta
 Gln Asp Gln Ser Asp Glu Ala Gln Glu Lys Met Val Tyr Ile Tyr His Ser Leu
 380 385 390 395

aag aat agt aga gag aca cac atg atg gga aat gag gag gaa aca gag ttt cat
 Lys Asn Ser Arg Glu Thr His Met Met Gly Asn Glu Glu Glu Thr Glu Phe His
 400 405 410

gga ctt cgc ttc cct ttg tca cat ttg gat gca ctg aag caa att tgg aat agt
 Gly Leu Arg Phe Pro Leu Ser His Leu Asp Ala Leu Lys Gln Ile Trp Asn Ser
 415 420 425 430

cca gct att tct gtc aag gac ctg aaa ctt act aca gat gag gaa aag gaa agc
 Pro Ala Ile Ser Val Lys Asp Leu Lys Leu Thr Thr Asp Glu Glu Lys Glu Ser
 435 440 445 450

ctg gta tta tcc ctc tgg aca gaa tgt tta att caa gta gtc tag
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<211> 465

<212> DNA

<213> Mus musculus

<400> 2

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tgc aag cgg gtg aag gag gag ctg cct gaa acg ctt tct gta tta aac ttt gac
 Cys Lys Arg Val Lys Glu Glu Leu Pro Glu Thr Leu Ser Val Leu Asn Phe Asp
 20 25 30 35

agc ccc agt agt ttc ttc gaa agt tta atc tca ccc atc aaa gta gag act ttt
 Ser Pro Ser Ser Phe Phe Glu Ser Leu Ile Ser Pro Ile Lys Val Glu Thr Phe
 40 45 50

ttc aag gaa ttc tgg gaa caa aag ccc ctt ctc att cag agg gat gac cct gta
 Phe Lys Glu Phe Trp Glu Gln Lys Pro Leu Leu Ile Gln Arg Asp Asp Pro Val
 55 60 65 70

ctg gcc aaa tat tac cag tct ctg ttc agc ctc tca gat ctg aag aga ctc tgc
 Leu Ala Lys Tyr Tyr Gln Ser Leu Phe Ser Leu Ser Asp Leu Lys Arg Leu Cys

75					80					85					90				
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Tyr	Ser	Pro	Thr	Val	Pro	Leu	Ala	His	Glu	Tyr	Ser	Val	Glu	Ser	Glu	Asp	Arg		
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275					280					285									
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290					295					300					305				
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Lys	Leu	Ser	Gly	Phe	Leu	Arg	Thr	Leu	Ala	Asp	Gln	Leu	Glu	Gly	Arg	Glu	Glu		

310

315

320

ctg ctg tca tca gat atg aag aag gac ttc gtc aag cac aga ctc cct cct ttc
 Leu Leu Ser Ser Asp Met Lys Lys Asp Phe Val Lys His Arg Leu Pro Pro Phe
 325 330 335 340

ttc gag gga aat gga acg gag acg atg gac cca ggt aaa cag ttg cca agg ttg
 Phe Glu Gly Asn Gly Thr Glu Thr Met Asp Pro Gly Lys Gln Leu Pro Arg Leu
 345 350 355 360

gac aac ata ata aga ctg cag ttc aaa gat cac att gtc ctc aca gta ggg cca
 Asp Asn Ile Ile Arg Leu Gln Phe Lys Asp His Ile Val Leu Thr Val Gly Pro
 365 370 375

gat aag aat cca ttt gat gaa gct caa caa aag gtg gtt tac atc tat cat tct
 Asp Lys Asn Pro Phe Asp Glu Ala Gln Gln Lys Val Val Tyr Ile Tyr His Ser
 380 385 390 395

ctg aag aat gtg agg cag atg cac atg ata gga gaa gag gag gaa tcc gag att
 Leu Lys Asn Val Arg Gln Met His Met Ile Gly Glu Glu Glu Glu Ser Glu Ile
 400 405 410

ttc ggt ctt cgc ttt cct tta tca cat gtg gat gct ctg aag caa atc tgg tgc
 Phe Gly Leu Arg Phe Pro Leu Ser His Val Asp Ala Leu Lys Gln Ile Trp Cys
 415 420 425 430

ggg tca cca att cgt gtt aag gaa ctg aaa ctt gac aca gat gaa gaa aag gag
 Gly Ser Pro Ile Arg Val Lys Glu Leu Lys Leu Asp Thr Asp Glu Glu Lys Glu
 435 440 445 450

aac ctg gca ctg tct ctc tgg tcg gag tct tta atc caa gta ctc tag
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<211> 475

<212> DNA

<213> Rattus norvegicus

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 Cys Lys Gln Val Lys Glu Leu Pro Asn Thr Leu Ser Val Leu Asn Phe Asp
 20 25 30 35

agc ccc agt agt ttc ttt gaa agt tta ata tca ccc atc aaa gta gag aca ttt

Ser	Pro	Ser	Ser	Phe	Phe	Glu	Ser	Leu	Ile	Ser	Pro	Ile	Lys	Val	Glu	Thr	Phe
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Leu	Ala	Ala	Tyr	Tyr	Gln	Ser	Leu	Phe	Ser	Leu	Ser	Asp	Leu	Arg	Ser	Leu	Cys
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Asp	Glu	Leu	Trp	Arg	Ile	Gln	Glu	Lys	Leu	Glu	Cys	Tyr	Phe	Gly	Ser	Leu	Val
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		185						190				195					
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Tyr	Ser	Pro	Thr	Val	Pro	Leu	Ala	Arg	Glu	Tyr	Ser	Val	Glu	Pro	Glu	Asp	Arg
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Ser	Ile	Ser	Gly	Leu	Val	Phe	Asp	Ile	Ala	Lys	Glu	Asp	Val	Ala	Leu	Arg	Thr
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gga	atg	ccc	agg	cgg	atg	ctc	atg	aat	gtg	gaa	acc	cca	gct	gac	gta	aca	agg
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Lys	Leu	Ser	Gly	Phe	Leu	Arg	Thr	Leu	Ala	Asp	Gln	Leu	Glu	Gly	Arg	Lys	Glu
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Leu	Leu	Ser	Ser	Asp	Met	Lys	Lys	Asp	Phe	Val	Met	His	Arg	Leu	Pro	Pro	Phe
	325				330				335					340			
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Cys	Val	Gly	Asn	Gly	Thr	Glu	Ser	Met	Asn	Pro	Gly	Gly	Lys	Leu	Pro	Arg	Leu
	345					350					355						360
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Tyr	Gly	Leu	Arg	Phe	Pro	Leu	Ser	Tyr	Val	Asp	Ala	Leu	Lys	Gln	Ile	Trp	Cys
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Gly	Ser	Pro	Val	Arg	Val	Lys	Asp	Leu	Lys	Leu	Gly	Thr	Asp	Glu	Glu	Lys	Glu
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			455				460					465					